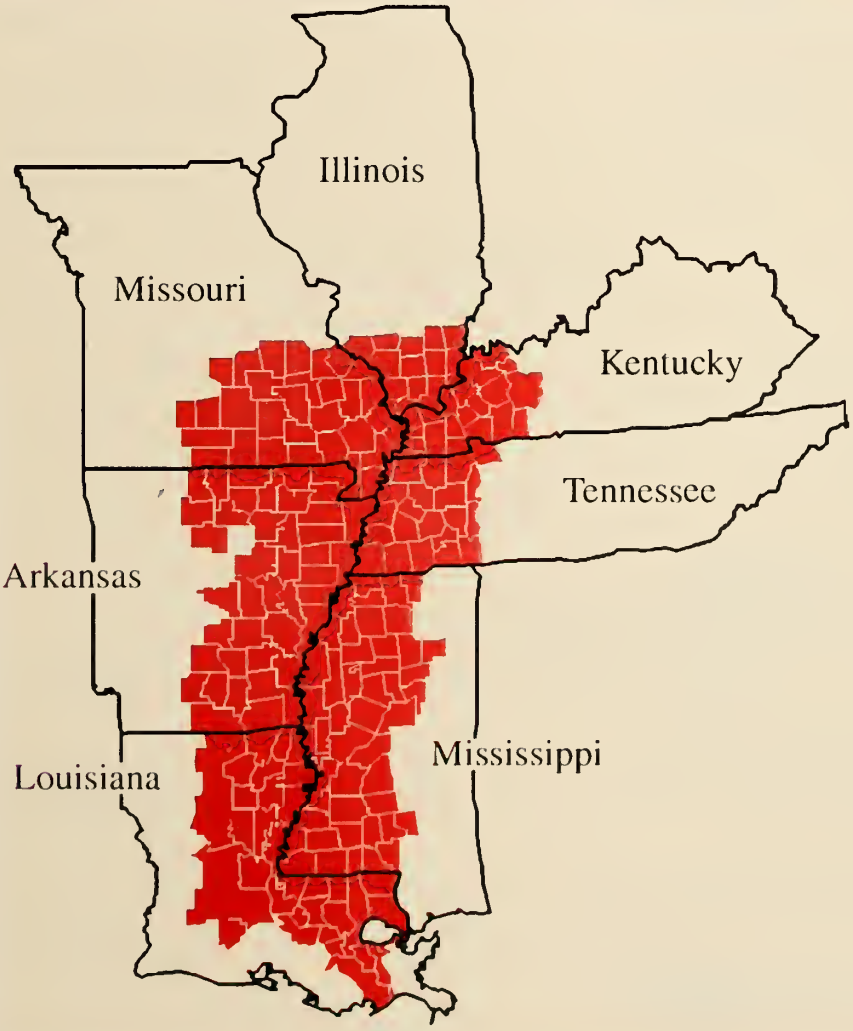
Mississippi Delta Project
Health and Environment
Prospectus



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A partnership project involving communities, government, academia, and private sector organizations

May 1995

Current Participants in the Mississippi Delta Project
Health and Environment

Community-Based Organizations

Jesus People Against Pollution
Columbia, Mississippi

Federal Agencies

Agency for Toxic Substances and Disease Registry

Centers for Disease Control and Prevention
- National Center for Environmental Health
- National Institute for Occupational Safety and Health
- Office of the Associate Director for Minority Health

Environmental Protection Agency
- Office of Environmental Justice
- Office of Solid Waste and Emergency Response

National Institutes of Health
- National Institute of Environmental Health Sciences
- National Library of Medicine

State Representatives

Arkansas
- Department of Health
- Department of Pollution Control and Ecology
- (HBCU to be announced)

Illinois
- Department of Public Health
- Illinois Environmental Protection Agency
- (Academic institution to be announced)

Kentucky
- Department for Health Services
- Division of Environmental Health
- Kentucky State University

Louisiana
- Louisiana Department of Health and Hospitals
- Department of Environmental Quality
- Southern University at Baton Rouge

Mississippi
- Department of Health
- Department of Environmental Quality
- Mississippi Valley State University

Missouri
- Department of Health
- Lincoln University

Tennessee
- Department of Health
- Department of Environment and Conservation
- LeMoyne Owen College
- Meharry Medical College

Other Participants

Minority Health Professions Foundation

mh01D4778

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"Economic development of the Delta cannot be separated from the cultural and ethnic realities and cannot be planned apart from careful management of its resources and protection of its environment. This report envisions a coming time when ecological mindfulness and economic development are no longer seen as incompatible but as indivisible."

(Lower Mississippi Delta Development Commission, 1990)

Introduction

The preceding quotation was taken from the report *Realizing the Dream...Fulfilling the Potential*, which was prepared by the Lower Mississippi Delta Development Commission.[1] The words reflect a vision for the Lower Mississippi Delta Region wherein ecological concerns co-exist with economic development and social advancements. The Commission concluded its work and disbanded in 1990. The Commission's final report is a key document that combines concerns for improving the health of ethnic and racial minority populations in the United States and for achieving environmental justice. The work of the Commission provides compelling support for a demonstration project that forms partnerships in pursuit of regional excellence in public health and environment protection. The Mississippi Delta Project—Health and Environment is an attempt by government, academia, private sector organizations, and community residents to implement, within a key geographic region, a program that demonstrates how partnerships can be formed to identify and reduce the impact of environmental hazards. This document outlines the background of the Delta Project, its goal and objectives, its partners, and how the project is organized.

The Mississippi Delta Region was defined by the Lower Mississippi Delta Commission as a 219-county strip along the Mississippi River in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. The counties and parishes in the Delta Project are listed on the inside of the back cover page of this brochure. The Region is populated by approximately 8.3 million people, including a large number of persons of low income, African Americans, and growing numbers of other people of color.

No comprehensive database currently exists on the environmental hazards in the Delta Region. However, from databases in several federal and state health and environmental agencies, it is known that the Region's environmental hazards include the spectrum of non-point environmental problems such as mercury contamination in some states' surface waters, pesticides runoff in agricultural areas, seasonal degradation of ambient air quality, vector control, and the environmental and health consequences of natural disasters. Point-source environmental problems include releases of toxic substances from waste sites, lead-based paint in older housing, hazardous materials handling, chemical spills and explosions, and inadequate municipal waste treatment capacity. As one example, within the 219 counties, at least 40 uncontrolled hazardous waste sites are on the Environmental Protection Agency's (EPA) National Priorities List (NPL). The NPL is a listing of the most hazardous waste sites nationwide. In addition, states in the Region are responsible for managing the health and environmental risks posed by waste management, including non-federal abandoned waste sites.

Because of the diversity of environmental hazards and the high concern of the public over environmental and health impacts, government and private sector organizations are challenged to make an impact on reducing the risks posed by individual environmental hazards. While some communities and government agencies have worked closely on ameliorating specific environmental problems, a comprehensive regional plan to mobilize partnerships toward the goal of reducing environmental impacts and enhancing development is lacking. By focusing on a region with historic and demonstrated minority health disparities and identified environmental hazards, it is possible to develop the data and experience that will be necessary to shape public health, environmental, and educational interventions within the Region. Federal and state agencies, academic institutions, and community residents in the Region propose that a concentrated effort of sustainable partnerships be undertaken in the Lower Mississippi Delta Region.

Background

The need for a regional demonstration project that proposes to establish regional excellence in public health and environmental protection, through partnerships, stems from the confluence of three concerns: 1) the need for further economic development of the Lower Mississippi Delta, 2) the importance of improving the health of persons of color and underserved populations, and 3) the need to ensure that environmental justice is achieved as a matter of social justice. Each concern has contributed to the genesis of the Delta Project. Details of each concern are described in the following paragraphs.

The Lower Mississippi Delta Development Commission

The Lower Mississippi Delta Development Commission was established in October 1988 to study and make recommendations on economic needs, problems, and opportunities in the Region and to develop a 10-year economic development plan for it. Two reports have been prepared by the Commission. They are *Body of the Nation: The Interim Report of the Lower Mississippi Delta Development Commission* and *The Delta Initiatives: Realizing the Dream...Fulfilling the Potential*. The latter report, which was the Commission's final report, notes "This final report is a trumpeting call by the Delta's own people to begin the tasks that will create a new and better tomorrow for this, the body of the nation, and therefore a brighter future for the nation as a whole." The same report concludes that the problems found in the Delta are common to all seven states—Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee—that have counties or parishes in the Region. The Commission makes a clear and compelling call for regional cooperation and cohesiveness in order to reach better solutions to the Region's problems.

The Commission's final report, *Realizing the Dream...Fulfilling the Potential*, contains sections on education, health, housing, community development, agriculture, natural resources, public infrastructure, entrepreneurial development, technology development, business and industrial development, tourism, and the environment. Each section contains goals and attendant recommendations. The sections on environment, community development, health, and education are especially pertinent to the Delta Project. The Environment section states:

> A growing awareness of the need to face environmental problems was expressed by Lower Mississippi Delta citizens in hearings in each state. Yet many people still argue that environmental protection and economic development are incompatible. In fact, the reverse is true.
>
> In the 21st Century, the world cannot accommodate growth and economic development apart from environmental protection. This means that in the long run, protecting the Delta's environment will pay dividends by attracting more new businesses, tourism dollars, research grants for institutions of higher learning and job opportunities. This new economic development concept will foster a great sense of "pride of place" among the Region's residents. All people will have to think of themselves asenvironmentalists. This will build a new environmental ethic and will create policies that reconcile preserving the environment with aggressive pursuit of economic growth.

The Commission developed three goals for environmental protection in the Delta Region:

- By the year 2001, the Delta will improve its overall environmental quality by meeting or surpassing national environmental standards, and by preparing for natural and man-made disasters.

- By the year 2001, the Delta will be at the forefront of environmental research and will promote community environmental awareness and education throughout the Region.

- By the year 2001, all states in the Delta will achieve methods to dispose of their hazardous and solid waste without threatening groundwater and surface water and air quality.

Specific recommendations in support of the environment goals were developed in support of each goal. The set of recommendations is listed in Appendix A of this document.

Goals for community development, health, and education in the Delta include the following:

- **Community Development**—By the year 2001, all 219 Delta counties and parishes will be operating in accordance with local strategic plans, integrated with the plans of state, regional, and federal entities. These plans will reflect volunteer initiatives representing local population diversity.

  Attending this goal are recommendations that encourage the development of training programs for local leaders, volunteers, and community action groups. In particular, institutions of higher learning are encouraged to develop and implement leadership exchange programs for individuals from various groups, including academic institutions, businesses, state and local governments, churches, and communities.

- **Health**—By the year 2001, all residents of the Delta will have access to health education and promotion programs.

  Recommendations attending this goal include encouragement to health care providers to adopt strategies to enhance health prevention practices, for state departments of education and local school systems to examine K-12 health education curricula to ensure prevention material is presented, and for training programs to increase time spent on health prevention.

- **Education**—Expand the role of Delta higher education institutions in community and economic activities by the year 2001.

  Recommendations in support of this goal include encouraging institutions of higher learning to establish interstate programs among private industry, state government, and community-based groups.

Other goals could have been cited that would be relevant to achieving regional excellence in public health and environmental protection, but it is apparent from these goals that the Lower Mississippi Delta Commission envisioned the need for the creation of partnerships as an essential step in developing the Region and for addressing the area's problems. A guiding principle for developing strategies for achieving quality of life and sustaining the natural resource base in the Region is what has come to be known as **sustainable development**.

Minority Health Programs

Preventing adverse health effects in disadvantaged communities and people of color exposed to environmental hazards is a priority for government health agencies at all levels. Minority populations, particularly African Americans, Hispanics, and Native Americans, suffer disproportionately from preventable morbidity and mortality. Regardless of income, education, or geographic locale, these populations are in

poorer health than their white, non-Hispanic counterparts. However, the health impact of the environment on minority populations has not been adequately characterized.

Reducing the disparity in health and improving quality of life among disadvantaged groups and among ethnic and racial populations impacted by environmental hazards will require the collective commitment of health professionals and environmental health scientists. Federal agencies and state health departments in the Region all have health outcome data that characterize the health of the public. For example, mortality data and disease incidence data are generally available. However, resources have generally been lacking in terms of linking morbidity and mortality databases and environmental quality data.

As illustration of federal minority health programs, the Agency for Toxic Substances and Disease Registry (ATSDR) and the Centers for Disease Control and Prevention (CDC) have conducted a series of projects to assess the impact of the environment on health in minority communities. The agencies' efforts since 1987 have evolved into an important Minority Health Program at ATSDR. In 1988, with the appointment at CDC/ATSDR of the Associate Director for Minority Health, a 5-Year Strategic Plan for Minority Health was completed (See Appendix B). Over the past several years, four goals have been developed for ATSDR's Minority Health Program. All or parts of these goals are believed by ATSDR to be shared by other federal agencies and some state agencies that have undertaken minority health and environmental justice programs.

- **Demographics**—Develop a comprehensive demographic profile of communities living near hazardous waste sites and other sources of hazardous substances.

- **Health Studies and Applied Research**—Determine associations between identified adverse human health outcomes in disadvantaged communities and people of color and hazardous substances, and implement health interventions based on significant findings from health studies and other applied research investigations.

- **Community Involvement and Risk Communication**—Develop and execute environmental risk communication and community education programs to mitigate and prevent adverse health effects from environmental toxicants in minority communities.

- **Training and Education**—Increase the numbers and racial and ethnic diversity of persons in the professional disciplines that constitute environmental public health. This includes assisting with curriculum development in academic institutions, supporting faculty through research projects, convening seminars and workshops in toxicology and related disciplines, and conducting short-term training for professionals in disciplines relevant to identifying and preventing environmental hazards.

Since 1987, ATSDR has investigated the public health impact of hazardous waste sites and other sources of exposure to environmental toxicants on persons in disadvantaged communities. ATSDR's efforts in minority health have not been concentrated on any one geographic area of the country. Rather, the Agency has pursued the four goals of its Minority Health Program in disadvantaged communities around individual waste sites across the nation. This approach has provided ATSDR with valuable data and insight into environmental hazards faced by minority groups. However, the goal of reducing the disparity in health and improving quality of life among disadvantaged groups and among ethnic and racial populations requires a more concentrated effort by the public and private sectors than what can possibly be accomplished by using a site-by-site approach and by any one agency acting alone.

Environmental Justice Emergence

The emergence of environmental justice as a significant social concern has contributed to identifying the need for the Mississippi Delta project. Although much of the evidence is anecdotal and circumstantial, there are mounting concerns that environmental health risks are borne disproportionately by members of the population who are poor and nonwhite. Concerns that possible disparities in environmentally induced illness are related to socioeconomic class and ethnicity or race have made this issue a top priority on the environmental health agenda of the United States.

Most of the studies cited as evidence of environmental inequities are observational. In other words, these studies document disparities by relying on statistical associations between demographic characteristics of populations, primarily race and income, and indirect surrogates for exposure to hazardous substances, such as residential proximity to pollution sources. According to a variety of sources,[2] these investigations have been consistent in finding that members of disadvantaged groups are more likely than affluent whites to 1) live near sources of environmental pollution, such as hazardous waste sites; 2) reside in urban areas where ambient levels of certain pollutants, such as lead and carbon monoxide, are elevated; 3) eat significantly greater amounts of contaminated fish; and 4) be employed in potentially dangerous occupations, such as migrant farm work.

Inequitable distribution of the costs and benefits associated with environmental regulations has been the topic of discussion and study for more than 20 years. During the 1980s, hundreds of grassroots and community action groups brought attention to the environmental problems facing disadvantaged communities. In 1982, demonstrations by members of a low-income, predominantly African-American community against the proposed site for a polychlorinated biphenyl (PCB) landfill in Warren County, North Carolina, garnered national media coverage. The following year, a General Accounting Office (GAO) study found that three of the four largest operating hazardous waste sites in the southern United States were located in primarily African-American communities.[3] In 1985, the first national African-American environmental organization, the Center for Environment, Commerce, and Energy, was established. That same year, the National Council of Churches' Eco-Justice Working Group began to address environmental issues.

The United Church of Christ's (UCC's) Commission for Racial Justice released a nationwide study in 1987 on the demographics of populations living near hazardous waste sites.[4] The report found that in communities with one or more commercial hazardous waste facilities, the proportion of racial minorities was significantly greater than in communities without such facilities. Similarly, researchers found that African Americans were disproportionately represented in areas around *operating* (i.e., controlled) hazardous waste facilities around Detroit, Michigan. However, a study by University of Massachusetts investigators did not find any disparities according to racial or cultural groups residing near *operating* hazardous waste facilities. ATSDR has completed a study of the demographics of communities located near *uncontrolled* waste facilities. By its analysis, African Americans are represented in disproportionate numbers in communities located near Superfund priority waste sites.

In 1990, ATSDR sponsored the "Minority Health Conference: Focus on Environmental Contamination," which was the first federally sponsored conference of this kind. Media coverage accelerated in 1991 and a number of conferences and symposia were held to examine the issue. In 1993, Congressman Louis Stokes convened the U.S. Congressional Black Caucus Brain Trust Meeting on Environmental Racism. In February 1994, six government agencies with the support of community and academic leaders convened the first federal symposium on environmental justice entitled "The Symposium on Health Research and Needs to Ensure Environmental Justice." This symposium was attended by approximately 1,200 grassroots, academic, government, labor, business, and community leaders. During the symposium, President Clinton signed Executive Order #12898, which states "...each Federal agency shall make achieving environmental

justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...." (See Appendix C.)

In response to the Executive Order, federal agencies are developing and implementing strategies to establish a framework to ensure that they design and conduct research, educational, regulatory, service, and support programs in full partnership with stakeholders in a manner that considers, and addresses as appropriate, disproportionate and adverse environmental and minority populations. Of particular relevance to the Delta Project are the environmental justice strategies developed by the Department of Health and Human Services (DHHS) and the EPA in response to the Executive Order. These strategies include several that will be incorporated into the Mississippi Delta Project. Both set of strategies are consistent with the following two ***working definitions*** developed by EPA's Office of Environmental Justice :

- **Environmental Justice**—means the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, culture, income, or education level with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

- **Fair Treatment**—means that no population, due to political or economic disempowerment, is forced to shoulder the negative human health and environmental impacts of pollution or other environmental hazards.

The DHHS strategy for environmental justice covers a range of responsibilities and activities, largely current, some planned. The activity areas addressed in the strategy are public education, training, services, data collection and analysis, and health research. These activity areas are complemented by three cross-cutting efforts that cover DHHS program policies, interagency coordination, and public partnerships.

The goal of EPA's strategy is to ensure that 1) no segment of the population, regardless of race, color, national origin, or income, as a result of EPA's policies, programs, or activities, suffers disproportionately from adverse human health or environmental effects, and all people live in clean and sustainable communities; and 2) those who must live with environmental decisions—community residents; environmental groups; state, tribal and local governments; businesses—must have every opportunity for public participation in the making of those decisions. An informed and involved local community is a necessary and integral part of protecting the environment.

The EPA strategy outlines cross-cutting mission areas in health and environmental research; data collection and analysis; stakeholder access to information; enforcement and compliance assurance; partnerships, outreach, and communication with stakeholders; Native American, indigenous, and tribal programs; and integration of environmental justice into all EPA activities.

Both DHHS and EPA have listed the Mississippi Delta Project as a model interagency environmental justice project. Strategies outlined in both institutions' environmental justice programs will be incorporated into the Mississippi Delta Project (where appropriate for conditions in the Region).

Health Promotion and Disease Prevention

Recommendations in the Lower Mississippi Delta Development Commission's final report advocate actions that would enhance environmental protection and the health and well-being of the Region's people. Similar concerns are evident in government agencies' minority health programs and in the emergence of environmental justice concerns. From experience accrued in many areas of public policy and service, it is now recognized that the most beneficial approach to solving many health and environmental problems is through health promotion and disease prevention measures. That is, prevention of factors that cause excess morbidity and premature mortality is well known by public health officials to be the most cost effective and

healthful approach. Similarly, prevention of environmental hazards is to be preferred to remediating hazards after they have occurred. For these reasons, the Delta Project adopts the prevention model as its core concept. Moreover, education strategies to promote and maintain a healthful environment must be undertaken to institute the ATSDR vision of "Healthy People in a Healthy Environment."

The public health prevention model contains the following elements:

- **Identify** instances of excess morbidity, premature mortality, or unsuspected health risk. This is often achieved through health surveillance systems, clinical observations, laboratory findings, or outcomes of research investigations.

- Assess the causal factors that account for the excess morbidity, premature mortality, or identified health risk factor. This is pursued through epidemiologic investigations, laboratory studies, clinical studies, or other kinds of investigations.

- **Intervene** with actions that interdict or mitigate the causal factors that account for the identified health risks. Because many adverse health problems are multifactorial in terms of risk factors, intervention strategies are developed and applied on a small scale to determine their efficacy. Intervention strategies are then refined and the revised strategies are applied to the population at risk.

- **Promote** the interventions that prevent or mitigate the adverse health event. This occurs through dissemination of actions and materials to health care providers, health officials, and public and private sector agencies that describe the occurrences, causes, and prevention actions specific to the identified health risk.

- **Evaluate** the effectiveness of the implemented interventions and adjust them where needed to improve reduction of human health risk.

Project Description

Given the concerns of the Lower Mississippi Delta Development Commission for improvements in the social and economic conditions of the Region, and recognizing the importance of using prevention methods to achieve improvements in the public health and environment of the Region in ways consistent with environmental justice, the Delta Project has evolved.

The **overall goal** of the Delta Project is to demonstrate that partnerships between government, academia, private sector organizations, and community residents can identify key environmental hazards (and barriers to this identification), promote environmental quality, and reduce and, where possible, prevent these hazards from impacting on health and the environment, with emphasis on persons in underserved communities. This goal will be pursued jointly by federal agencies, state and local health departments, local community groups, and institutions of higher education, particularly those that serve large minority populations.

The federal agencies cooperating in the Mississippi Delta Project are the Office of Solid Waste and Emergency Response (OSWER), Office of Environmental Justice/EPA, the National Institute of Environmental Health Sciences/National Institutes of Health (NIH), the National Library of Medicine/NIH, the National Institute for Occupational Safety and Health/CDC, the National Center for Environmental Health/CDC, the Office of the Associate Director for Minority Health/CDC, and ATSDR. Each federal agency brings to this project different statutory responsibilities and resources bearing on specific environmental hazards. Moreover, state and local agencies have specific health and environmental authorities for managing environmental hazards. By joining the interests, authorities, and resources of the relevant federal and state

agencies, a more comprehensive and effective effort can be implemented to reduce and, where possible, prevent the health and environmental impacts of environmental hazards.

Because of the demographics and economic profiles inherent to the Mississippi Delta Region, this project will give special emphasis to identifying and reducing the disparities of environmental hazards experienced by disadvantaged communities and persons of color. The participation of communities in the conduct of the project will be essential for long-term success. Working closely with communities and Historically Black Colleges and Universities (HBCUs) in the Region will be an essential component of this project. (See Appendices D and E.)

Overall Objectives

Therefore, in association with state and local health agencies, regulatory agencies, and academic institutions in the Delta Region, and consistent with the principles of sustainable development and preventing adverse health impacts from environmental hazards, **the objectives of the Delta Project** are these:

- **Identify** key environmental hazards and barriers to recognizing hazards that may affect the health and quality of life of people who live in communities believed to be at risk.

- **Assess** the potentially harmful impact on high risk-populations of exposure to key environmental hazards.

- **Increase the awareness** of health care providers practicing in the Delta Region of the adverse environmental health impact of key environmental hazards. Empower and educate the community about environmental hazards. Evaluate the impact of educational efforts to ensure that health care providers are familiar with the recognition and treatment of illness associated with exposure to environmental hazards.

- **Enhance capacity building** in state and local health departments, environmental departments, academic institutions, and community non-profit groups to address environmental public health issues associated with minority health.

- **Increase the awareness** of the importance of environmental public health among students at Head Start Centers, other preschools, and primary through college-level institutions in the Delta Region.

- **Provide pollution prevention and health promotion education** regarding exposure to environmental hazards.

- Ensure that efforts occur that lead to **enhanced community empowerment and involvement** in addressing environmental public health issues.

- **Identify and coordinate** state and federal actions to address environmental health issues in the Delta Region.

- **Evaluate and disseminate the effectiveness** of strategies to prevent health and environmental impacts of key environmental hazards.

These objectives are being pursued through a phased approach for the Delta Project. Bearing in mind that the Delta Project will attempt to achieve these objectives through formation of partnerships across and within government and private sector lines, it is fundamental to implement the Delta Project in steps that

build consensus and cooperation and that draw upon existing resources. Three phases have therefore been identified for this project.

Delta Project's Phases

Phase 1 — Problem Definition and Needs Assessment

The first step is to determine the problems in the Region that are linked to environmental hazards. This is being accomplished through a needs assessment. In this context, a needs assessment is expected to ask what needs to be done, given conditions and circumstances in the Region. For the purposes of the Delta Project, the emphasis is on key environmental hazards that impact underserved communities and persons of color. The needs assessment is being conducted by Meharry Medical College, Nashville, Tennessee, in cooperation with the Minority Health Professions Foundation. The Steering Group for the Delta Project will advise Meharry on the overall conduct of the needs assessment, based on recommendations from the Assessment Workgroup (refer to the following section on architecture).

The needs assessment will be conducted using four profiles developed by Meharry:

1) Profile the key **environmental hazards** believed to be of consequence to the public health of communities in the Region.

2) Profile the **demographics** of the Region, health problems, and associated health status.

3) Profile the **providers** of health and environmental services in the Region, including state and local health departments, local health care centers, environmental agencies, health providers, and non-government organizations that can serve as partners in achieving the overall goal of the Delta Project.

4) Profile the **education resources** in the Region, including HBCUs, that have the capacity or potential to develop partnerships with communities and state agencies in support of the Delta Project's overall goal.

Using these profiles, Meharry will develop a list of key environmental hazards and associated public health concerns. This list will, in effect, represent the outcome of the identification component of the public health prevention model discussed previously. The list of needs will include recommendations to intervene in situations where adverse health effects are known to be associated with specific environmental hazards. Further, some needs will have to be addressed in terms of evaluating potential causal factors related to environmental hazards and public health consequences.

Phase 2 — Demonstration Interventions

This phase of the Delta Project will consist of selecting a number of needs identified in Phase I and developing intervention strategies appropriate for preventing health and environmental impacts. The profiles will be reviewed by the Steering Group, as advised by its Project Structure Workgroup (refer to the following section on architecture), to determine specific demonstration interventions recommended for the Region. The Steering Group in conjunction with local communities will select the problems to be addressed, help create partnerships for each demonstration intervention, and serve as a resource to evaluate the effectiveness of specific interventions.

Phase 3 — Regional Health and Environmental Promotion

Given the outcomes from the demonstration community-specific interventions, successful interventions will be identified and promoted for adoption within the Region. The specifics of this phase will be contingent on the outcomes and experiences of Phase 2.

Delta Project's Architecture

A Steering Group will provide guidance and advice to Meharry Medical School and other contractors. This group comprises representatives from government, academia, private sector organizations, and community advocacy groups. Federal agencies include ATSDR, CDC, NIH, and EPA. Each of the seven states has representatives from state health and environmental agencies. The HBCUs, community-based organizations, and other relevant groups are members of the Steering Group, which will choose its own chairperson.

The HBCUs will play a key role in the conduct of the Delta Project, particularly in efforts to educate Delta Region residents about environmental hazards. The HBCUs in the Delta Region have educated a large number of African-American professionals who teach, practice health care, and assume leadership roles in many of the Delta Region minority communities. These professionals have the credibility needed to ensure the success of the project and are strongly committed to supporting HBCUs in the Region. Meharry Medical College serves as the primary HBCU. Meharry's history of providing health care in the Delta Region provides the credibility needed to ensure the trust of the people in the Region.

Reporting to the Steering Group will be workgroups established to provide advice and guidance in support of the Delta Project's overall goal and long-term objectives. The following four workgroups have been established by the Steering Group:

- **Membership**—This workgroup will ensure relevant and current representation of agencies and groups on the Steering Group.

- **Project Structure**—This workgroup advises the Steering Group on the goals, objectives, purposes, tactics, and architecture of the Delta Project and its component activities.

- **Assessment**—This workgroup provides advice to the Steering Group on the design, outcome, and adequacy of the Delta Project's individual activities, including information profiles and demonstration projects.

- **Executive**—This workgroup serves as the primary agent of the Steering Group for the purpose of developing policies to recommend to the Steering Group and implementing actions determined by it. This workgroup consists of the co-chairs of the Steering Group, chairs of the other three workgroups, Meharry officials conducting the needs assessment, and ad hoc members as appropriate.

Collaborative Projects

Because creating partnerships for the purpose of developing regional excellence in public health and environmental protection is the heart of the Delta Project, many ongoing projects by federal, state, and private sector organizations are relevant to the overall goal. The Steering Group encourages the conduct of projects in support of the overall goal of the Delta Project. These collaborative projects, as they become known to the Steering Group, will be shared within the Region. Collaborative projects will be selected by the Steering Group, as recommended by the Structure Workgroup, based upon their project officers' knowledge of and commitment to meeting the Delta project's overall goal.

Some current examples are the following activities:

- **National Library of Medicine, NIH**—Conducting an environmental information outreach program (a hands-on training course for staff and students in HBCUs).

- **Texas Southern University**—Conducting environmental health training for pharmacists who serve in minority communities.

- **National Institute of Environmental Health Sciences**—Sponsorship of the developmental environmental health science centers at Tulane and Xavier universities.

- **National Institute of Environmental Health Sciences**—Sponsorship of a worker training site in Lavonia, Louisiana.

- **Morehouse School of Medicine and National Medical Association**—Providing environmental medicine training for physicians in the Region.

- **Howard University College of Nursing**—Conducting a train-the-trainer program to educate nurses in the Delta Region about environmental hazards.

- **Texas Southern University College of Pharmacy**—Conducting a train-the-trainer program to educate pharmacists in the Delta Region about environmental hazards.

- **Mississippi Action For Progress (M.A.P.)**, the largest Head Start agency in Mississippi—Developing an environmental health curriculum to be tested in 20 counties throughout the state. The program will focus on Head Start students and their families in 45 of the 82 counties in Mississippi.

Funding and Adjusted Timelines

The funding for Phase I of the Delta Project will be provided by participating federal agencies. It is anticipated that the four profiles being developed by Meharry Medical College will be completed by the end of fiscal year 1995. Funds for Phases 2 and 3 will be sought from government and private sector organizations, based on the recommendations from the Steering Group. A timetable for other significant activities for the Delta Project will be developed by the Steering Group.

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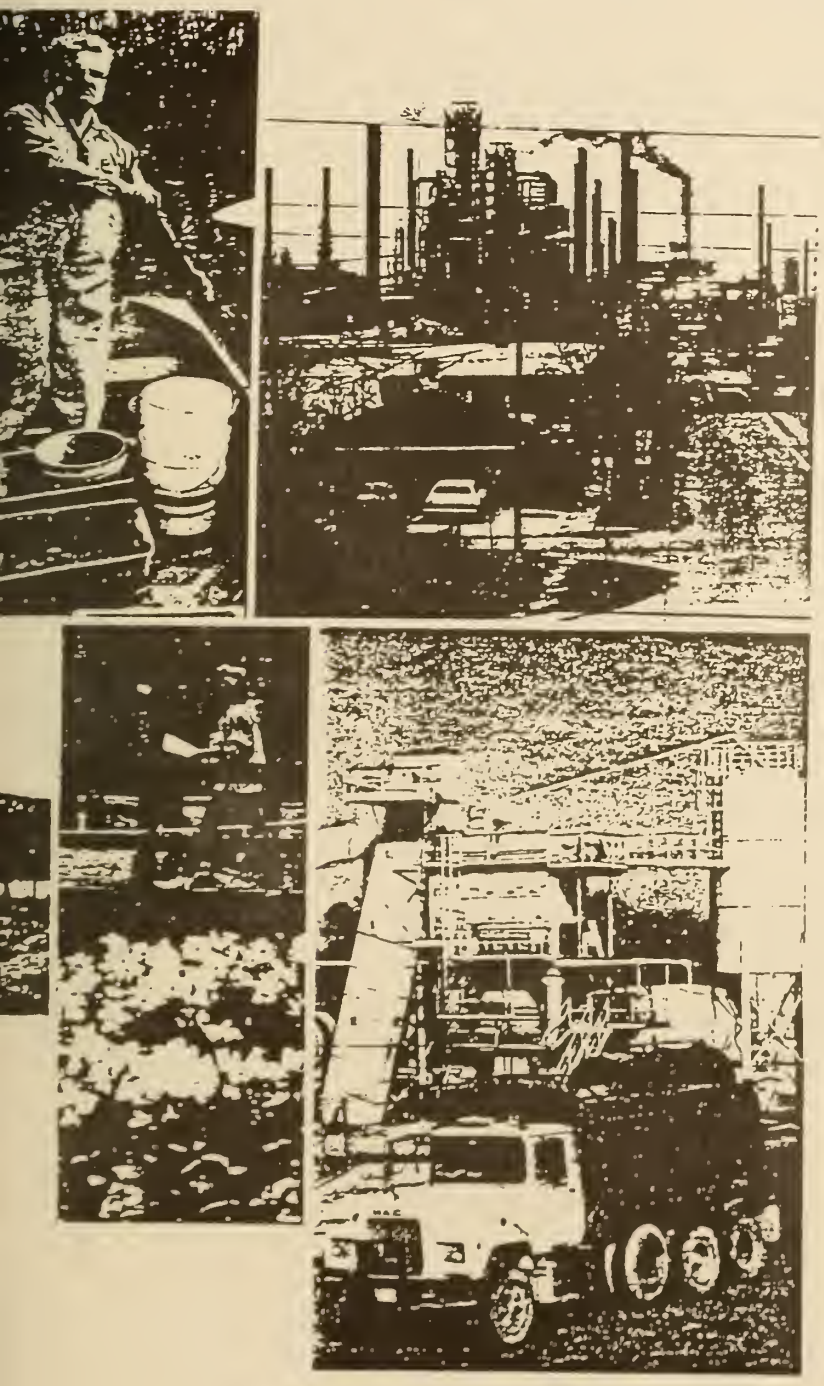


The Environment

In Partnership with Economic Development

"Environmental quality and human welfare are not two independent evaluations. They are two views of the same system of interactions. It is not possible for one to remain good while the other is bad....poverty, prejudice, public education, health, services, militarism, inner cities and pollution all qualify as environmental crises."

Frederick E. Smith, Harvard University, ecologist, 1970

This section of the report deals with the environment within the broad context of regional economic and social development. A growing awareness of the need to face environmental problems was expressed by Lower Mississippi Delta citizens in hearings in each state. Yet many people still argue that environmental protection and economic development are incompatible. In fact, the reverse is true.

In the 21st Century, the world cannot accommodate growth and economic development apart from environmental protection. This means that in the long run, protecting the Delta's environment will pay dividends by attracting more new businesses, tourism dollars, research grants for institutions of higher learning and job opportunities. This new economic development concept will foster a greater sense of "pride of place" among the region's residents. All people

will have to think of themselves as environmentalists. This will build a new environmental ethic and will create policies that reconcile preserving the environment with aggressive pursuit of economic growth.

Such an objective is not impossible. In fact, the region already has made progress in this direction. Aquaculture, a new, already important industry, is local labor-intensive, relatively low polluting and provides an economic opportunity for which the region is uniquely suited. Current demand for catfish and crawfish is greater than supply.

Low-impact nature or eco-tourism represents another avenue for economic development that is low polluting and, to this end, the creation of wildlife sanctuaries and national parks facilitates a strategy of development. As the hearing testimony shows, the region's citizens do not want to endure poor water quality, poor air quality or misuse of any of the Delta's precious natural resources. That fact heightens the importance of these new opportunities.

Goals and recommendations presented in this section of the report are designed to enhance and protect existing natural resources for long term, sustained economic growth and to foster change in traditional attitudes toward the environment and its ability to be a partner in the economic development process.

The Environment

ISSUE: Environmental Standards and Emergency Procedures

TEN YEAR GOAL: By the year 2001, the Delta will improve its overall environmental quality by meeting or surpassing national environmental standards, and by preparing for natural and man-made disasters.

SITUATION: As is true for the entire nation, the Delta is fast approaching pollution saturation points. The effects of urban-industrial and agricultural pollution are being felt throughout the region. In the past, the region often ignored environmental quality by stressing growth as a singular objective. But today it is recognized more than ever before that effective economic development must go hand-in-hand with protecting the environment.

In addition, the Delta is known to have a potential for, and a history of, natural disasters associated with flooding and seismic activity. Without adequate preparation by state and local governments, businesses and industries are limited in their insurance options. To pursue sound economic development and to protect the environment and people against natural and man-made disasters, comprehensive emergency contingency plans must be developed for the region and individual states.

RECOMMENDATIONS:

- **Congress** should enact uniform national air and water quality standards; EPA should uniformly enforce national pollution standards.
- **EPA** should study the cumulative effects of contaminants and contaminant loading to ecological systems over time, and adopt appropriate regulations reflecting the results of this research.
- **EPA** and **state environmental agencies** should adopt more stringent regulations in order to lower emissions of toxins into air, water and soil.
- **EPA** and **states** should adopt numerical rather than "narrative" standards for air and water pollution control for all discharged toxic pollutants.
- **States** should adopt responsible environmental quality standards, effective continuous monitoring systems and enforcement strategies to ensure the continued protection of the environment and its long term improvement.
- **States** should require industry to install instruments that continuously monitor the waste stream on all industrial out flow pipes that have the capacity to pollute.

- **Federal** and **state governments** should require new and existing industries to bear the full cost of negative environmental impacts they cause.

- **States** should establish a Delta compact to evaluate and recommend uniform regulations and policies regarding air and water quality standards for the Delta.

- **States** should offer economic incentives to promote the attainment of environmental standards by existing industries, agribusinesses and municipalities that do not have adequate funds for waste management and equipment modernization.

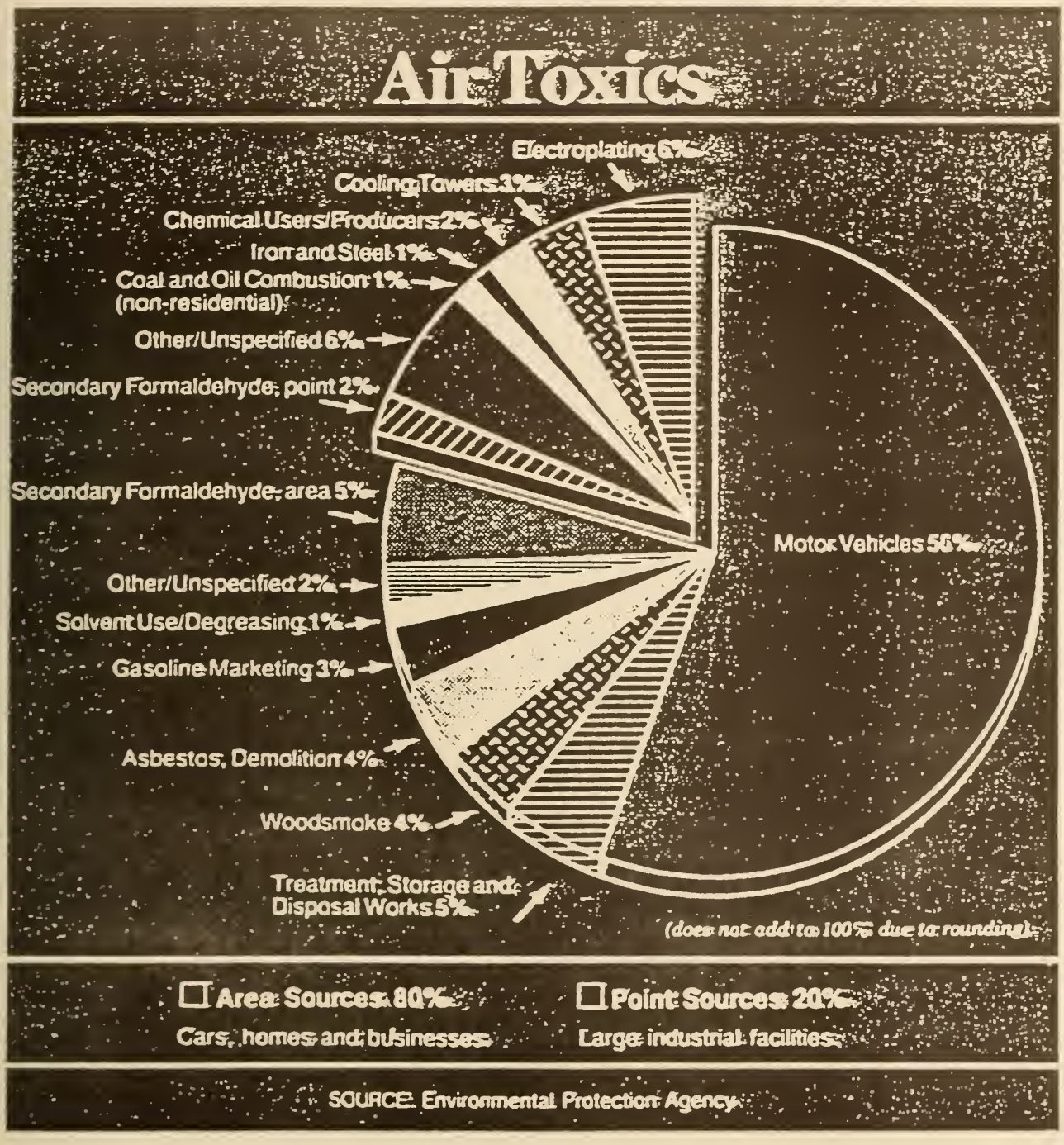
- **States** and **local governments** should give preference to environmentally sound industries when considering tax inducements for economic development.

- **EPA**, in cooperation with the **Delta states**, should create and fund a regional river ecology monitoring program for the continuous measurement of ambient river water quality, sediment quality, and living resources, at stations along the Mississippi River; **EPA** should share data with member states and work with them to produce plans for reducing river pollution.

- **States** should accelerate development of disaster contingency plans and require local governments to develop disaster plans and programs.

- **States, local governments, nonprofit organizations** and **the private sector** should work to enhance public awareness of the possibility of natural disaster in the region through educational efforts.

- **States, local governments** and **private industries** should establish equipment repositories and designate fast response teams for locations throughtout the entire Delta for handling hazardous waste and material spills; they should coordinate these activities with local fire departments and other emergency response agencies.


Air Toxics
Electroplating 6%
Cooling Towers 3%
Chemical Users/Producers 2%
Iron and Steel 1%
Coal and Oil Combustion 1% (non-residential)
Other/Unspecified 6%
Secondary Formaldehyde, point 2%
Secondary Formaldehyde, area 5%
Other/Unspecified 2%
Solvent Use/Degreasing 1%
Gasoline Marketing 3%
Asbestos, Demolition 4%
Woodsmoke 4%
Treatment, Storage and Disposal Works 5%
Motor Vehicles 56%
(does not add to 100% due to rounding)
Area Sources 80%
Cars, homes and businesses
Point Sources 20%
Large industrial facilities
SOURCE: Environmental Protection Agency

The Environment

ISSUE: Environmental Research, Education and Regional Awareness

TEN YEAR GOAL: By the year 2001, the Delta will be at the forefront of environmental research and will promote community environmental awareness and education throughout the region.

SITUATION: An integrated regional environmental plan must include research and an education/information component that builds public awareness and promotes positive environmental behavior. To produce a more informed citizenry that can responsibly address environmental problems, education must be improved on all levels. Initiatives should enhance environmental awareness and education, as well as promote responsible waste reduction and the development of environmentally-sound industries.

RECOMMENDATIONS:

- **States** should create centers for environmental research and solid and hazardous waste research in institutions of higher education, including components for technology transfer. Such centers should become part of a Delta consortium established to share research and technical information, both regionally and nationally.

- **Federal** and **state governments** should target funding for health studies throughout the region. Such studies should include analyses of potential environmental exposures and the health effects of environmental hazards to humans.

- **The federal government**, in cooperation with the **Delta states**, should establish a regional tumor registry, and secure funding for quality control and assurance of data.

- **Federal, state** and **private** research dollars should be targeted to study the disproportionate effects of environmental pollution and hazardous materials on minority, low-income and rural communities.

- **Federal** and **state governments** should continue to fund research concerning the relationship between surface activities and ground and surface water contamination, and to clearly define recently-discovered "windows" in clay layers over aquifers.

- **The private sector** and **nonprofit organizations** should target funds and in-house expertise toward solving environmental problems.

- **The federal** and **state governments** and **the private sector** should support and help expand existing efforts by environmental education centers, networks and community organizations. (Example: The National Network for Environmental Education, jointly organized by EPA and the Alliance Exchange.)

- **Federal** and **state governments** and **nonprofit organizations** should cooperate on Community right-to-know law workshops on a regular basis.

- **State** and **local governments** and **nonprofit groups** should conduct conferences and workshops that acquaint community leaders, educators, and concerned citizens with environmental issues and information. (Examples: National Issues Forums; Memphis State University/Memphis Light, Gas and Water's Energy Vision process).

- **States** should integrate environmental topics and issues into appropriate subject areas at all levels of formal and non-traditional education, developing and utilizing curricula that include a substantive environmental component as part of state curriculum requirements.

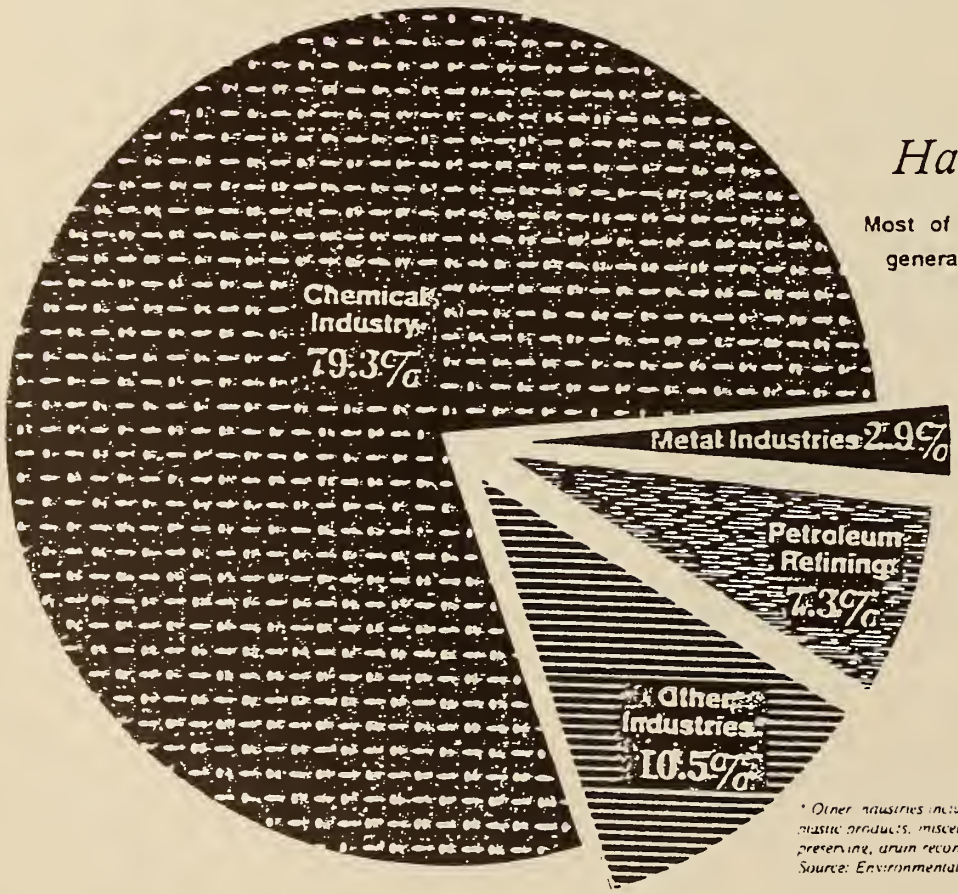
- **States, the private sector** and **nonprofit organizations** should create environmental source books for use in classrooms. (Example: Louisiana Department of Environmental Quality's Environmental Sourcebook.)

The Environment

ISSUE: Waste Management

TEN YEAR GOAL: By the year 2001 all states in the Delta will achieve methods to dispose of their hazardous and solid waste without threatening ground and surface water and air quality.

SITUATION: Waste management has become an important issue for the Delta, and the focus of many controversies. There are not enough hazardous waste treatment sites and acceptable landfill locations at present to adequately handle the region's waste. Concurrently, ground and surface waters have been degraded because of past practices. This, coupled with resistance to siting facilities and the importation of waste from other states, has resulted in severe problems. In many cases this has caused an inordinate impact on minority, poor and rural populations. The Delta must adopt waste management models that are appropriate for a developing region. Delta states must take actions to ensure water quality protection and improvements where necessary. Improved siting, clearer regulations and public awareness programs by the individual states are necessary to ensure the adequate processing and disposal of hazardous, medical and solid wastes. Waste reduction, recycling, co-generation and other methods of waste management should be utilized to ensure the most efficient and healthful delivery system.



Industries' Hazardous Waste

Most of the nation's hazardous waste is generated by the chemical industry.

* Other industries include electrical equipment, transportation equipment, paper and plastic products, miscellaneous manufacturing, motor freight transportation, wood preserving, drum reconditioning industries and nonelectrical machinery.
Source: Environmental Protection Agency

RECOMMENDATIONS:

- **States** should form a Delta state compact to facilitate the processing and disposal of solid and hazardous waste.
- **The federal government** should adopt uniform requirements and enforcement procedures for solid and hazardous waste management.
- **States** should develop state-wide hazardous and solid waste management and capacity assurance plans. Sub-state regional and local solid waste plans should be required, and technical assistance provided by the states. These plans must become an integral part of the economic development planning process.
- **Federal** and **state governments** should encourage the use of recycled paper at all government agencies, and the use of recycled products by the private sector.
- **States** should create a regional industrial materials exchange service that matches industrial waste manufacturers with potential waste users.
- **Federal** and **state governments** should enforce strict regulations to protect surface and sub-surface waters and recharge areas.

- **Federal and state governments** should make loans, grants and services accessible to local communities, businesses and organizations for the purpose of developing or expanding various types of local recycling and composting programs; to develop markets for recycled materials; to advance and implement innovative technologies in solid waste management; and to develop educational programs and initiatives concerning waste.

- **The private sector** should work to develop markets for recycled materials.

Disposal Sites for Hazardous Wastes

This chart shows the number of confirmed hazardous-waste sites in each state. The sites that are eligible for cleanup under the superfund program are considered the worst hazardous-waste sites in the nation.

State	Superfund Sites*	Other Hazardous Waste Sites**	State	Superfund Sites*	Other Hazardous Waste Sites**
Alabama	12	70	Nebraska	5	160
Alaska	1	—	Nevada	—	—
Arizona	9	250	New Hampshire	15	172
Arkansas	10	13	New Jersey	110	†400
California	88	250	New Mexico	10	†376
Colorado	16	74	New York	76	420
Connecticut	14	—	North Carolina	21	88
Delware	21	137	North Dakota	2	3
Florida	51	760	Ohio	32	108
Georgia	13	350	Oklahoma	11	11
Hawaii	6	—	Oregon	7	80
Idaho	4	—	Pennsylvania	97	40
Illinois	39	64	Rhode Island	9	20
Indiania	37	32	South Carolina	21	75
Iowa	23	300	South Dakota	1	2
Kansas	11	203	Tennessee	13	255
Kentucky	17	26	Texas	28	352
Louisiana	11	—	Utah	11	75
Maine	8	36	Vermont	8	102
Maryland	10	30	Virginia	22	25
Massachusetts	22	351	Washington	43	131
Michigan	81	910	West Virginia	6	—
Minnesota	40	83	Wisconsin	39	321
Mississippi	3	200	Wyoming	2	13
Missouri	21	84	Puerto Rico	9	2
Montana	10	26	Guam	1	—
			Total	1,177	7,483

**Final and proposed sites as of June 1988*
***Data are for Oct. 1986, the most recent available*
†As of July 1988.
Sources: Environmental Protection Agency; Association of State and Territorial Solid Waste Management Officials

Appendix B

5-Year Plan for the Office of the Associate Director for Minority Health

CDC/ATSDR Minority Health Strategic Plan 1989

Associate Director for Minority Health
Office of the Director
Centers for Disease Control and Prevention
Agency for Toxic Substances and Disease Registry
Public Health Service
U.S. Department of Health and Human Services

Mission Statement

The Mission of the Office of the Associate Director for Minority Health is to improve the health of the African-American (Blacks), Asian-American/Pacific Islander, Hispanic American, and Native American/ Alaskan Native citizens, and where appropriate, similar ethnic/racial subgroups in and out of the United States, through policy development and program analysis at CDC and ATSDR.

The mission will be accomplished through the following major goal, subgoals, and objectives:

Major Goal

To enhance the overall health of the American public by reducing the burden of preventable disease and illness through health promotion and disease prevention initiatives geared specifically toward U.S. minority populations and, where appropriate, similar ethnic/racial subgroups inside and outside of the United States.

Subgoals

Measurable subgoals include the following:

A. The assurance that policy at CDC and ATSDR appropriately directs the agencies' activities toward minority health.

B. The enhancement of the research enterprise through innovative scientific investigations in health promotion, health protection, and disease prevention to reduce the disproportionate burden of disease and illness in minority group members.

C. The development of an effective internal and external communication network related to minority health.

Philosophical Approach

The mission and goal of the Office of the Associate Director for Minority Health are based on the philosophy that to be effective, minority health initiatives must be operational in the centers, institutes, program offices, and programs at CDC and ATSDR. These initiatives, where appropriate, must be transferred to State and local government and non-government agencies and organizations. The Office, therefore, assumes an operational versus a programmatic management approach in actualizing its mission. This management approach demands ongoing interaction and communication between people at CDC, ATSDR, and Public Health

Service, other Federal officials, and State and local government officials, and the leadership of non-government agencies and organizations (i.e., voluntary agencies, community based organizations, philanthropic groups, etc.). Programmatic authority and responsibility should be maintained at the program level to maximize fiscal and human resources. However, assessment, advocacy, coordination, and evaluation of processes and outcomes related to the efficacy of minority health activities are focused primarily in the Office of the Associate Director for Minority Health.

Objectives

The objectives for the Office of the Associate Director for Minority Health related specifically to the three subgoals include the following:

Subgoal A

To assure that policy at CDC and ATSDR appropriately directs the agencies' activities towards minority health.

Objectives

1. To encourage minority health activities in each center, institute, and program office at CDC and ATSDR.
2. To encourage the employment of significant numbers of minority senior professional and administrative persons at various policy and program levels within each center, institute, and program office at CDC and ATSDR and to assist in identifying and recruiting candidates.
3. To facilitate the development of minority health programs in State and local health departments, national, civic, social, religious, and voluntary organizations, and local community based organizations.
4. To maximize health services and resources available to minority populations.

Subgoal B

To enhance the research enterprise through innovative scientific investigations in health promotion, health protection, and disease prevention to reduce the disproportionate burden of illness in minority group members.

Objectives

1. To enhance applied public health research activities in health promotion and disease prevention among minority investigators.
2. To advise on minority health related research in health promotion and disease prevention by non-minority investigators, particularly at CDC and ATSDR.
3. To investigate social/behavioral approaches to reducing adverse health and health care indices in the minority populations.
4. To increase the number of minority undergraduate and postgraduate students interested and engaged in minority related public health research.
5. To enhance the quality and quantity of publications in the scientific literature related to minority health.

Subgoal C

To develop an effective internal and external communication network related to minority health.

Objectives

1. To facilitate the establishment of a minority health component in each agency within the Public Health Service (PHS).
2. To encourage the development of a minority health focus in each State health Department, and where appropriate in local health departments.
3. To encourage the implementation of a structured minority health network within the academic community.
4. To promote minority health educational initiatives in civic, social, religious, community, and voluntary agencies and organizations in both minority and non-minority communities.
5. To assure that information systems provide data adequate to assess the need for, and evaluate the impact of programs directed to members of minority groups.

Strategies*

Strategies address the question "How do we met objectives?" "How do we get it done?" They should be supported by a composite of action plans and programs. Strategies are primarily qualitative and can be translated into quantified tactics and action plans. They should be listed in rational and priority order. (See Strategies and Tactics)

Tactics*

Tactics detail how the strategies will be implemented and what specific activities are planned. They must be operational in nature and lend themselves to evaluation. Tactics are subject to change in direction and emphasis. They must lend themselves to qualified activities that can be monitored and controlled. (See Preliminary Assessment of 1989 Strategic Plan under Evaluation)

Evaluation

For the purpose of this report, evaluation is defined as the process of determining the value or amount of success in the achievement of predetermined objectives. This includes at least the following steps: formulation of the objectives; identification of the proper criteria to be used in measuring success; determination and explanation of the degree of success; recommendations for future program activities.

The following five areas will be used in evaluating the activities in the Office of the Associate Director for Minority Health:

1. **Effort**—the evaluations in this category have as their criteria of success the quantity and quality of activities that take place. This represents an assessment of input or energy regardless of output that is intended to answer the questions "What did you do?" and "How well did you do it?"

*Strategies and tactics developed in 1989 with the CDC/ATSDR Strategic Plan.

2. **Performance**—the performance or effect criteria measures the results of the effort rather than the effort itself. This requires a clear statement of ones objective. How much is accomplished relative to an immediate goal? Did any change occur? Performance can be measured at several levels-the number of cases found, the number hospitalized, the number cured or rehabilitated. Performance standards often involve several assumptions; however, in general, evaluation of performance involves fewer assumptions than evaluation of efforts.

3. **Adequacy of performance**—this criteria for success refers to the degree to which effective performance is adequate to the total amount of need. Adequacy is obviously a relative measure depending upon how high one sets ones goals.

4. **Efficacy**—a positive answer to the question, "Does it work?" often gives rise to the following questions: Is there any better way to obtain the same results? Efficacy is concerned with the evaluation of alternative paths or methods in terms of cost and money, time, personnel, and public convenience. In a sense, it represents the ratio between effort and performance, output divided by input.

5. **Process**—in the course of evaluating the success or failure of a program, a great deal can be learned about how and why a program works or does not work. The analysis of process can have both administrative and scientific significance particularly when the evaluation indicates that a program is not working as expected. The analysis of process will be made according to four main dimensions beginning with: 1) the attributes of the program itself; 2) the population exposed to the program; 3) the situation or context within which the program takes place; and 4) the different kinds of effects produced by the program.

These five criteria will be utilized to measure the impact of each objective for administrative, programmatic, and outcome purposes.

Appendix C

Presidential Document (Executive Order 12898)

Federal Register
Vol. 59, No. 32
Wednesday, February 16, 1994

Presidential Documents

Title 3—

The President

Executive Order 12898 of February 11, 1994

Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1-1. IMPLEMENTATION.

1-101. *Agency Responsibilities.* To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands.

1-102. *Creation of an Interagency Working Group on Environmental Justice* (a) Within 3 months of the date of this order, the Administrator of the Environmental Protection Agency ("Administrator") or the Administrator's designee shall convene an interagency Federal Working Group on Environmental Justice ("Working Group"). The Working Group shall comprise the heads of the following executive agencies and offices, or their designees: (a) Department of Defense; (b) Department of Health and Human Services; (c) Department of Housing and Urban Development; (d) Department of Labor; (e) Department of Agriculture; (f) Department of Transportation; (g) Department of Justice; (h) Department of the Interior; (i) Department of Commerce; (j) Department of Energy; (k) Environmental Protection Agency; (l) Office of Management and Budget; (m) Office of Science and Technology Policy; (n) Office of the Deputy Assistant to the President for Environmental Policy; (o) Office of the Assistant to the President for Domestic Policy; (p) National Economic Council; (q) Council of Economic Advisers; and (r) such other Government officials as the President may designate. The Working Group shall report to the President through the Deputy Assistant to the President for Environmental Policy and the Assistant to the President for Domestic Policy.

(b) The Working Group shall: (1) provide guidance to Federal agencies on criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(2) coordinate with, provide guidance to, and serve as a clearinghouse for, each Federal agency as it develops an environmental justice strategy as required by section 1-103 of this order, in order to ensure that the administration, interpretation and enforcement of programs, activities and policies are undertaken in a consistent manner;

(3) assist in coordinating research by, and stimulating cooperation among, the Environmental Protection Agency, the Department of Health and Human Services, the Department of Housing and Urban Development, and other agencies conducting research or other activities in accordance with section 3-3 of this order;

(4) assist in coordinating data collection, required by this order;

(5) examine existing data and studies on environmental justice;

(6) hold public meetings as required in section 5–502(d) of this order; and

(7) develop interagency model projects on environmental justice that evidence cooperation among Federal agencies.

1–103. *Development of Agency Strategies.* (a) Except as provided in section 6–605 of this order, each Federal agency shall develop an agency-wide environmental justice strategy, as set forth in subsections (b)–(e) of this section that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The environmental justice strategy shall list programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to, at a minimum: (1) promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations; (2) ensure greater public participation; (3) improve research and data collection relating to the health of and environment of minority populations and low-income populations; and (4) identify differential patterns of consumption of natural resources among minority populations and low-income populations. In addition, the environmental justice strategy shall include, where appropriate, a timetable for undertaking identified revisions and consideration of economic and social implications of the revisions.

(b) Within 4 months of the date of this order, each Federal agency shall identify an internal administrative process for developing its environmental justice strategy, and shall inform the Working Group of the process.

(c) Within 6 months of the date of this order, each Federal agency shall provide the Working Group with an outline of its proposed environmental justice strategy.

(d) Within 10 months of the date of this order, each Federal agency shall provide the Working Group with its proposed environmental justice strategy.

(e) Within 12 months of the date of this order, each Federal agency shall finalize its environmental justice strategy and provide a copy and written description of its strategy to the Working Group. During the 12 month period from the date of this order, each Federal agency, as part of its environmental justice strategy, shall identify several specific projects that can be promptly undertaken to address particular concerns identified during the development of the proposed environmental justice strategy, and a schedule for implementing those projects.

(f) Within 24 months of the date of this order, each Federal agency shall report to the Working Group on its progress in implementing its agency-wide environmental justice strategy.

(g) Federal agencies shall provide additional periodic reports to the Working Group as requested by the Working Group.

1–104. *Reports to the President.* Within 14 months of the date of this order, the Working Group shall submit to the President, through the Office of the Deputy Assistant to the President for Environmental Policy and the Office of the Assistant to the President for Domestic Policy, a report that describes the implementation of this order, and includes the final environmental justice strategies described in section 1–103(e) of this order.

Sec. 2–2. FEDERAL AGENCY RESPONSIBILITIES FOR FEDERAL PROGRAMS. Each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including popu-

lations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.

Sec. 3–3. RESEARCH, DATA COLLECTION, AND ANALYSIS.

3–301. *Human Health and Environmental Research and Analysis.* (a) Environmental human health research, whenever practicable and appropriate, shall include diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to substantial environmental hazards.

(b) Environmental human health analyses, whenever practicable and appropriate, shall identify multiple and cumulative exposures.

(c) Federal agencies shall provide minority populations and low-income populations the opportunity to comment on the development and design of research strategies undertaken pursuant to this order.

3–302. *Human Health and Environmental Data Collection and Analysis.* To the extent permitted by existing law, including the Privacy Act, as amended (5 U.S.C. section 552a): (a) each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practical and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(b) In connection with the development and implementation of agency strategies in section 1–103 of this order, each Federal agency, whenever practicable and appropriate, shall collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action. Such information shall be made available to the public, unless prohibited by law; and

(c) Each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are: (1) subject to the reporting requirements under the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11001–11050 as mandated in Executive Order No. 12856; and (2) expected to have a substantial environmental, human health, or economic effect on surrounding populations. Such information shall be made available to the public, unless prohibited by law.

(d) In carrying out the responsibilities in this section, each Federal agency, whenever practicable and appropriate, shall share information and eliminate unnecessary duplication of efforts through the use of existing data systems and cooperative agreements among Federal agencies and with State, local, and tribal governments.

Sec. 4–4. SUBSISTENCE CONSUMPTION OF FISH AND WILDLIFE.

4–401. *Consumption Patterns.* In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.

4–402. *Guidance.* Federal agencies, whenever practicable and appropriate, shall work in a coordinated manner to publish guidance reflecting the latest scientific information available concerning methods for evaluating the human health risks associated with the consumption of pollutant-bearing fish or wildlife. Agencies shall consider such guidance in developing their policies and rules.

Sec. 5–5. PUBLIC PARTICIPATION AND ACCESS TO INFORMATION. (a) The public ...ay submit recommendations to Federal agencies relating to the incorporation of environmental justice principles into Federal agency programs or policies. Each Federal agency shall convey such recommendations to the Working Group.

(b) Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations.

(c) Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

(d) The Working Group shall hold public meetings, as appropriate, for the purpose of fact-finding, receiving public comments, and conducting inquiries concerning environmental justice. The Working Group shall prepare for publi- -eview a summary of the comments and recommendations discussed at the public meetings.

Sec. 6–6. GENERAL PROVISIONS.

6–601. *Responsibility for Agency Implementation.* The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order.

6–602. *Executive Order No. 12250.* This Executive order is intended to supplement but not supersede Executive Order No. 12250, which requires consistent and effective implementation of various laws prohibiting discriminatory practices in programs receiving Federal financial assistance. Nothing herein shall limit the effect or mandate of Executive Order No. 12250.

6–603. *Executive Order No. 12875.* This Executive order is not intended to limit the effect or mandate of Executive Order No. 12875.

6–604. *Scope.* For purposes of this order, Federal agency means any agency on the Working Group, and such other agencies as may be designated by the President, that conducts any Federal program or activity that substantially affects human health or the environment. Independent agencies are requested to comply with the provisions of this order.

6–605. *Petitions for Exemptions.* The head of a Federal agency may petition the President for an exemption from the requirements of this order on the grounds that all or some of the petitioning agency's programs or activities should not be subject to the requirements of this order.

6–606. *Native American Programs.* Each Federal agency responsibility set forth under this order shall apply equally to Native American programs. In addition, the Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps to be taken pursuant to this order that address Federally-recognized Indian Tribes.

6–607. *Costs.* Unless otherwise provided by law, Federal agencies shall assume the financial costs of complying with this order.

6–608. *General.* Federal agencies shall implement this order consistent with, and to the extent permitted by, existing law.

6–609. *Judicial Review.* This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural,

enforceable at law or equity by a party against the United States, its agencies, its officers, or any person. This order shall not be construed to create any right to judicial review involving the compliance or noncompliance of the United States, its agencies, its officers, or any other person with this order.

William J. Clinton

THE WHITE HOUSE,
February 11, 1994.

[FR Doc. 94-3685
Filed 2-14-94; 3:07 pm]
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Editorial note: For the memorandum that was concurrently issued on Federal environmental program reform, see Issue No. 6 of the *Weekly Compilation of Presidential Documents.*

Appendix D

Historically Black Colleges and Universities in the Lower Delta Region

Arkansas

- Arkansas Baptist College
- Philander Smith College
- Shorter College
- University of Arkansas at Pine Bluff

Kentucky

- Kentucky State University

Louisiana

- Dillard University
- Grambling State University
- Southern University System
  - Southern University A & M College
  - Southern University at Baton Rouge
  - Southern University at New Orleans
  - Southern University at Shreveport
- Xavier University

Mississippi

- Alcorn State University
- Coahoma Community College
- Hinds Community College
- Jackson State University
- Mary Holmes College
- Mississippi Valley State University
- Rust College
- Tougaloo College

Missouri

- Harris-Stowe State College
- Lincoln University

Tennessee

- Fisk University
- Knoxville College
- Knoxville College-Morris Town
- Lane College
- Lemoyne-Owen College
- Meharry Medical College
- Tennessee State University

Appendix E

Presidential Document (Executive Order 12876)

Federal Register
Vol. 58, No. 212
Thursday, November 4, 1993

Presidential Documents

Title 3—

The President

Executive Order 12876 of November 1, 1993

Historically Black Colleges and Universities

By the authority vested in me as President by the Constitution and the laws of the United States of America, in order to advance the development of human potential, to strengthen the capacity of historically Black colleges and universities to provide quality education, and to increase opportunities to participate in and benefit from Federal programs, it is hereby ordered as follows:

Section 1. There shall be established in the Department of Education the President's Board of Advisors on Historically Black Colleges and Universities ("Board of Advisors" or "Board"), a Presidential advisory committee. The Board of Advisors shall issue an annual report to the President on participation by historically Black colleges and universities in federally sponsored programs. The Board of Advisors will also provide advice to the Secretary of Education ("Secretary") and in the annual report to the President on how to increase the private sector role in strengthening historically Black colleges and universities, with particular emphasis on enhancing institutional infrastructure and facilitating planning, development, and the use of new technologies to ensure the goal of long-term viability and enhancement of these institutions. Notwithstanding the provisions of any other Executive order, the responsibilities of the President under the Federal Advisory Committee Act, as amended (5 U.S.C. App. 2), which is applicable to the Board of Advisors, shall be performed by the Secretary, in accordance with the guidelines and procedures established by the Administrator of General Services.

Sec. 2. The members of the Board of Advisors shall be appointed by the President. The Board shall include representatives of historically Black colleges and universities, other institutions of higher education, business and financial institutions, private foundations, and secondary education.

Sec. 3. The White House Initiative on Historically Black Colleges and Universities, housed in the Department of Education, shall: (1) provide the staff, resources, and assistance for the Board of Advisors; (2) assist the Secretary in the role of liaison between the executive branch and historically Black colleges and universities; and (3) serve the Secretary in carrying out his responsibilities under this order.

Sec. 4. To carry out the purposes of this order, each executive department and each agency designated by the Secretary shall, consistent with applicable law, enter into appropriate grants, contracts, or cooperative agreements with historically Black colleges and universities. The head of each agency subject to this order shall establish an annual goal for the amount of funds to be awarded in grants, contracts, or cooperative agreements to historically Black colleges and universities. Consistent with the funds available to the agency, the goal shall be an amount above the actual amount of such awards from the previous fiscal year and shall represent a substantial effort to increase the amounts available to historically Black colleges and universities for grants, contracts, or cooperative agreements. In order to facilitate the attainment of the goals established by this section, the head of each agency subject to this order shall provide technical assistance and information to historically Black colleges and universities regarding the program activities of the agency and the preparation of applications or proposals for grants, contracts, or cooperative agreements.

Sec. 5. Each executive department and designated agency shall appoint a senior official, who is a full-time officer of the Federal Government and who is responsible for management or program administration, to report directly to the department or agency head or designated agency representative on department or agency activity under this order and to serve as liaison to the Board and White House Initiative. To the extent permitted by law and regulation, each executive department and designated agency shall provide appropriate information requested by the Board and the White House Initiative staff pursuant to this order.

Sec. 6. Each executive department and designated agency shall develop an annual plan for, and shall document, the agency's effort to increase the ability of historically Black colleges and universities to participate in federally sponsored programs. These plans shall describe the measurable objectives for proposed agency actions to fulfill this order and shall be submitted at such time and in such form as the Secretary shall designate. In consultation with participating agencies, the Secretary shall review these plans and develop, with the advice of the Board of Advisors, an integrated Annual Federal Plan for Assistance to Historically Black Colleges and Universities for consideration by the President. The Secretary shall ensure that each president of a historically Black college or university is given the opportunity to comment on the proposed Annual Federal Plan prior to consideration by the President. Each participating agency shall submit to the Secretary and the Director of the Office of Management and Budget, an Annual Performance Report that shall measure each agency's performance against the objectives set forth in its annual plan. The Director of the Office of Management and Budget shall be responsible for overseeing compliance with the Annual Federal Plan.

Sec. 7. Each year the Board of Advisors shall report to the President on the progress achieved in enhancing the role and capabilities of historically Black colleges and universities, including findings and recommendations on the Annual Performance Reports, described in Section 6, submitted by the participating agencies. The Secretary shall disseminate the annual report to appropriate members of the executive branch and make every effort to ensure that findings of the Board of Advisors are taken into account in the policies and actions of every executive agency.

Sec. 8. The Department of Education, along with other Federal departments or agencies, shall work to encourage the private sector to assist historically Black colleges and universities through increased use of such devices and activities as: (1) private sector matching funds to support increased endowments; (2) private sector task forces for institutions in need of assistance; and (3) private sector expertise to facilitate the development of more effective ways to manage finances, improve information management, strengthen facilities, and improve course offerings. These steps will be taken with the goals of enhancing the career prospects of graduates of historically Black colleges and universities and increasing the number of such graduates with degrees in science and technology.

Sec. 9. In all its recommendations, the Board of Advisors shall emphasize ways to support the long-term development plans of each historically Black college and university. The Board of Advisors shall recommend alternative sources of faculty talent, particularly in the fields of science and technology, including faculty exchanges and referrals from other institutions of higher education, private sector retirees, Federal employees and retirees, and emeritus faculty members at other institutions of higher education

Sec. 10. The Board of Advisors, through the White House Initiative, shall provide advice on how historically Black colleges and universities can achieve greater financial security. To the maximum extent possible, the Board of Advisors shall consider how such institutions can enlist the resources and experience of the private sector to achieve such security.

Sec. 11. The Director of the Office of Personnel Management, in consultation with the Secretary and the Secretary of Labor, shall develop a program to improve recruitment and participation of graduates and undergraduate students of historically Black colleges and universities in part-time, summer and permanent positions in the Federal Government.

Sec. 12. Administration: (a) Members of the Board of Advisors shall serve without compensation, but shall be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law for persons serving intermittently in the Government service, (5 U.S.C. 5701–5707).

(b) The Board of Advisors and the White House Initiative shall obtain funding for their activities from the Department of Education.

(c) The Department of Education shall provide such administrative services for the Board as may be required.

Sec. 13. Executive Order No. 12677 of April 28, 1989, is hereby revoked.

William J. Clinton

THE WHITE HOUSE,
November 1, 1993.

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Editorial note: For the President's remarks on signing this Executive order, see the Weekly *Compilation of Presidential Documents* (vol. 29, issue 44).

Lower Mississippi Delta Counties and Parishes

Arkansas	Illinois	Kentucky	Louisiana	Mississippi	Missouri	Tennessee
Arkansas	Alexander	Ballard	Acadia	Adams	Bollinger	Benton
Ashley	Franklin	Caldwell	Allen	Amite	Butler	Carroll
Baxter	Gallatin	Calloway	Ascension	Artala	Cape Girardeau	Chester
Bradley	Hamilton	Carlisle	Assumption	Benton	Carter	Crockett
Calhoun	Hardin	Christian	Avoyelles	Bolivar	Crawford	Decatur
Chicot	Jackson	Crittenden	Caldwell	Carroll	Dent	Dyer
Clay	Johnson	Fulton	Catahoula	Claiborne	Douglas	Fayette
Cleveland	Massac	Graves	Concordia	Coahoma	Dunkin	Gibson
Craighead	Perry	Henderson	East Baton Rouge	Copiah	Howell	Hardeman
Crittenden	Pope	Hickman	East Carroll	Covington	Iron	Hardin
Cross	Pulaski	Hopkins	East Felicia	DeSoto	Madison	Haywood
Dallas	Randolph	Livingston	Evangeline	Franklin	Mississippi	Henderson
Desha	Saline	Lyon	Franklin	Grenada	New Madrid	Henry
Drew	Union	Marshall	Grant	Hinds	Oregon	Lake
Fulton	White	McCracken	Iberia	Holmes	Ozark	Lauderdale
Grant	Williamson	McLean	Jackson	Humphreys	Pemiscot	McNairy
Greene		Muhlenberg	Jefferson	Issaquena	Perry	Madison
Independence	**16 Counties**	Todd	Lafourche	Jefferson	Phelps	Obion
Izard		Trigg	LaSalle	Jefferson Davis	Reynolds	Shelby
Jackson		Union	Lincoln	Lafayette	Ripley	Tipton
Jefferson		Webster	Livingston	Lawrence	St. Genevieve	Weakley
Lawrence			Madison	Leflore	St. Francois	
Lee		**21 Counties**	Morehouse	Lincoln	Scott	**21 Counties**
Lincoln			Orleans	Madison	Shannon	
Lonoke			Ouachita	Marion	Stoddard	
Marion			Pointe Coupee	Marshall	Texas	
Mississippi			Plaquemines	Montgomery	Washington	
Monroe			Rapides	Panola	Wayne	
Ouachita			Richland	Pike	Wright	
Phillips			St. Bernard	Quitman		
Poinsett			St. Charles	Rankin	**29 Counties**	
Prairie			St. Helena	Sharkey		
Pulaski			St. James	Simpson		
Randolph			St. John the Baptist	Sunflower		
St. Francois			St. Landry	Tallahatchie		
Searcy			St. Martin	Tate		
Sharp			St. Tammany	Tippah		
Stone			Tangipahoe	Tunica		
Union			Tensas	Union		
Van Buren			Union	Walthall		
White			Washington	Warren		
Woodruff			West Baton Rouge	Washington		
			West Carroll	Wilkinson		
42 Counties			West Felicia	Yalobusha		
			Winn	Yazoo		
			45 Counties	**45 Counties**		